









Celebrate Earth

Each year, millions of people celebrate Earth Day worldwide through events and activities that demonstrate their support for environmental protection. First celebrated in 1970, Earth Day is now coordinated globally by the

Earth Day Network and observed in 192 different countries.

The Bradbury Science Museum is honoring Earth Day this year by hosting and participating in a number of events over the course of an entire week. Help us mark the occasion by attending events where you can learn about how Los Alamos National Laboratory scientists and community leaders are working to preserve and protect our natural resources.

- Be inspired at Science On Tap on April 16, 5:30 pm to 7:00 PM @ UnQuarked Wine Room. Laboratory scientists will talk about fabricating high-efficiency perovskite solar cells.
- Educate yourself at an Open House on April 23, Noon to 1:00 pm. Los Alamos National Laboratory biologists and anthropologists will be at the museum to answer questions about stewardship with museum visitors and host a live online Twitter chat.
- Join the community on April 25, 10:00 am to 2:00 pm for the grand opening of the brand new Los Alamos Nature Center. The museum's scientist ambassadors will be there talking to people about their favorite STEM topics.

Save the Date!

APR 3-12

NanoDays

Activities, Demonstrations, Scientists, Movies, and Art

APR 16

Science On Tap 5:30 PM to 7:00 PM

@ UnQuarked Wine Room 145 Central Park Square Los Alamos, New Mexico

APR 22

Earth Day Worldwide

Celebrate in your own way by planting a tree or recycling household goods.

APR **23**

Open House with

Environmental Scientists

Noon to 1:00 PM

Ask Laboratory biologists and anthropologists about natural resource questions.

APR **25**

Earth Day Festival

10:00 AM to 2:00 PM

@ Los Alamos Nature Center 2600 Canyon Road Los Alamos, New Mexico

@ THE BRADBURY APRIL 2015

Manhattan Project National Park



The idea to create a new national park commemorating the work of the Manhattan Project and its significance in world history was begun over ten years ago. Since then the Department of the Interior produced an official study, and the three main communities where the project took place (Oak Ridge, TN; Hanford, WA; and Los Alamos, NM) and their congressional delegations worked passionately to back the plan. On December 19, 2014, Congress passed and the President signed into law the authorization of the Manhattan Project National Historical Park.

The authorization mandates that this new park will be established no later than one year after signing. Here in Los Alamos, historic structures and places still owned by the

Department of Energy (DOE) and part of Los Alamos National Laboratory, and notable places in the Los Alamos Historic District such as Fuller Lodge, will be knitted together through Park interpretation. To establish the park, a Memorandum of Agreement defining how the Department of the Interior and the Department of Energy share roles and responsibilities for public access, managing park interpretation, and preserving the historic structures will be signed. The Bradbury Science Museum is part of an integrated DOE/Laboratory park planning team addressing local ramp-up to opening the park. Watch the newsletter for continuing updates.

SCIENCE ON TAP

The next installment of "Science on Tap" will be held on Thursday, April 16, starting at 5:30 PM at the UnQuarked Wine Room at 145 Central Park Square in downtown Los Alamos. Aditya Mohite and Wanyi Nie, research scientists at Los Alamos National Laboratory,



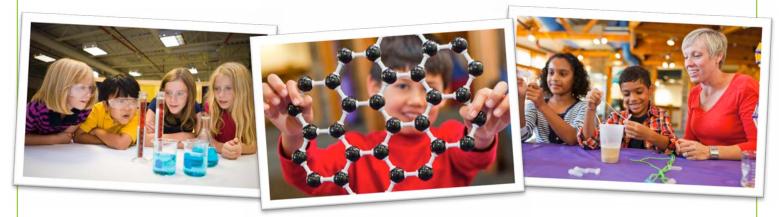
will discuss their work on perfecting a technique to improve perovskite crystal production for solar cells. Their research was recently featured in the journal *Science* revealing a new solution-based hot-casting technique that allows growth of highly efficient and reproducible solar cells from large-area perovskite crystals. "These perovskite crystals offer promising routes for developing low-cost, solar-based, clean global energy solutions for the future," said Aditya Mohite. These state-of-the-art photovaltaics are seen as the future of efficient solar technology. Sponsored by the Los Alamos Creative District and hosted by the Bradbury Science Museum, this series begins each evening with an informal 15-minute lecture followed by a lively group discussion. To learn more about this and other science topics, join us every third Thursday of the month for "Science On Tap."

@ THE BRADBURY APRIL 2015

Celebrate NanoDays With Us!

The Biggest Event for the Smallest Science!

April 3-12, 2015



The tiny world of nanoscale science is a big subject at the museum as we celebrate NanoDays on April 3-12, 2015. At NanoDays, a range of exciting programs will demonstrate the special and unexpected properties found at the nanoscale, examine tools used by nanoscientists, showcase nano materials with spectacular promise, and invite discussions of technology. By combining hands-on activities with presentations on current research, this nationwide event features new and unique learning experiences for both children and adults.

At the nanoscale—the scale of atoms and molecules—many common materials exhibit unusual properties. Our ability to manipulate matter at this microscopic size enables innovations that were never before possible. Using these advancements, nanotechnology is revolutionizing how we research and develop

medicine, computing, new materials, food, energy, and so many other things we rely on.

Visitors can experience these technologies firsthand by discovering how an inkjet printer works using capillary action, investigating new nano products and materials like Ferrofluid—a magnet that is also a fluid—and imagining what society might be like if we all wore invisibility cloaks! Other activities include using electricity to shape memory metal, and exploring thin films—the reason bubbles have so many colors.

Join us during NanoDays, April 3-12, to explore the minuscule world of atoms, molecules, and nanoscale forces

WHAT TO EXPECT:

- Hands-on activities all week
- Demos at 11AM & 2PM on Tues Thurs
- Fun Films about Nano at 1 PM daily
- Art of nanoscience on display all week



What's Nano About a Butterfly?

Blue Morpho butterfly wings look blue, but they're actually made of colorless nanostructures that reflect blue light into your eyes. New paints, fabrics, and low-energy electronic displays use the spacing of tiny nanostructures to create color.

To learn more about Nano, visit:

whatisnano.org

@ THE BRADBURY APRIL 2015



Can't make it to the museum for NanoDays? Here are some nanoscience activities from NISENet.org that are sure to get your neurons firing. Go ahead, you can try these at home.



Want more? Download the **DIY Nano** app from the iTunes store. It's free! https://itunes.apple.com/us/app/div-nano/id520611568



Egg Drop

In this activity, kids make Ooze and then test the material in an egg drop! Suitable for kids ages 5 and up. http://bit.ly/1COogcS



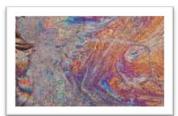
Space Elevator

In this activity, kids imagine what the world would look like if we could build an elevator to space! Suitable for kids ages 5 and up. http://bit.ly/1HjqNv8



Smelly Balloons

How can we detect things too small to see? In this activity, kids sniff out scents hidden in balloons! Suitable for kids ages 3 and up. http://bit.ly/1Gh87NX



Rainbow Film

How can you make rainbow colors out of clear nail polish? In this activity, kids use clear nail polish to create a beautiful iridescent pattern on black paper. Suitable for kids ages 3 and up. http://bit.ly/10ZNZUG



See DNA

How is DNA used to make tiny things? In this activity, kids extract DNA from wheat germ. Suitable for kids ages 5 and up. http://bit.ly/1BRnpUF

Subscribe to our Newsletter

To subscribe to our monthly newsletter, visit the museum's website at: www.lanl.gov/museum/events/events-mailing.php

Mark Your Calendars!

April 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 April Fool's Day	2	NanoDays Good Friday Passover Begins A	4 NanoDays
5	6	7	8	9	10	11
NanoDays Easter Sunday	NanoDays	NanoDays	NanoDays	NanoDays	NanoDays B	NanoDays (in lieu of Scientist in the Spotlight) Passover Ends
NanoDays	13	14	15 Tax Day	Science on Tap @ UnQuarked Wine Room 5:30 to 7:00 PM	17 A	18
19	20	21	Earth Day Administrative Professionals Day	Open House with Environmental Scientists 12 PM to 1 PM	24 Arbor Day	25 Earth Day Festival @ LA Nature Center 10 AM to 2 PM
26	27	28	29	30		

^{*}Los Alamos Spring Break (Apr. 3-10, 2015)

About the Museum

Bradbury Science Museum is located at 1350 Central Avenue in downtown Los Alamos, New Mexico. Approximately 40 interactive exhibits trace the history of the WWII Manhattan Project, highlight Los Alamos National Laboratory's current and historic research projects related to defense and technology, and focus on Laboratory research related to energy, environment, infrastructure, health and global security concerns.



MUSEUM HOURS:

Sunday & Monday: 1:00 PM to 5:00 PM, Tuesday – Saturday: 10:00 AM to 5:00 PM





